VIATION MAR. 7, 1955 WEEK

TRANSISTOR FUEL GAGE







New Honeywell Aircraft Instruments for the Jet Age

THE very nature of a jet engine and the new supersonic speeds and altitudes achieved by jet aircraft have created a need for a complete new group of instruments -instruments for the Jet Age. It is natural that Honeywell, a leader in the aeronautical controls field, would meet the challenge to develop and manufacture a line of these new instruments. Some of them are shown on this page; The completely Transistorized Fuel Gage, which meets the requirement for high accuracy, yet provides the utmost

The Multiplex Fuel Gage system, which in reliability saves precious weight and space by driving two or more indicators with

The Pressure Ratio Indicator, which proone power unit. vides accurate take off power checks and more economical cruise performance for

The Exhaust Gas Temperature Indicator, jet engines. which measures the exhaust gas tem-

perature within 5°C, safeguards engine life and insures adequate thrust. The tiny Thermistor Liquid Level Switch, which guards fueling operations and operates fuel warning lights.

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FOR HIGHER AE VALUES...

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Aviation Week

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APIATION WHIC Monk T, 1955



New Angles on Highspeed USAF, Navy Jet Fighters

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The conceve spiral bevel gene is 18,950 inches in diameter—of this-walled section. earherized and hardened with our dispersion. free metallurgical techniques and held to the

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Bda E. Dendon, Swar new recorded. F. H. Beshill her been appointed was needed and works memory of Kneet Ment Products agely maged succell and Com-serval Occupant, Stated, Pa. Other

nercal Division. Scott, De Other closect R. L. Cellett, vor prodest-aleand rates for Cameral Againsts, her been L. R. Roles, prodest of Hel-Col. Helicopters, Inc., Danbury, Court Card, E. A. G. Whittle, Seaton's Revol Capl. E. A. G. Whitte, States a normal Navy, and J. R. Fishfood, managing in space of Records & Ca., European, Ltd.,

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INDUSTRY OBSERVER

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Washington Roundup -ATA Condidates Rivley Tokes Over

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Air Show Plons

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Atlas Missile Progress

Renegotiation Support

There is a stong move on Capital Phil to serie the

AVIATION WEEK

Boeing Wins \$700-Million Tanker Award

· Contract for 300 jet-powered KC-135s climaxes hot aircraft industry competition for USAF prize.

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Seth Tolbett and Con Carty Le-

USAF met the relative contract is

Subcontracting

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· Lockheed will get AF order to pursue its proposal for 'advanced' design with engines in rear fusclage. Br Claude Witte AMC dopply empayades for readre

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Senate to Probe Missile Program, Airlift Cuts

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AVIATION MODE Much 7, 1993

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PARKE BLANES about \$1,000 km of Wagle TW belonger to Recog XE CD fiving but hell. Prop durator is about 15 ft. Turboprop-Jet XB-47D Prepares for First Flight







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Cost-reducing, weight-saving single-unit assemblies for high tensile, fixed nut applications High tensile anchor outs have normally been two piece assembles: the

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Safety Reports · CAA speeds reports on reported air violations.

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LETTERS

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ON NEW CRIMMAN SUPERSONIC

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LETTERS . . .

and suppose face.

Hope you will understand if I suggest to say the —I still have some tree to go.

Unecome

fly on























PRODUCTION ENGINEERING





Etch Replaces Machine in NAA Milling

By Irvine Stone and ferrito and materiate stocks. Con. . Tameto, Airc of the review developcontration has been in these systems. on at NAA-Downer was to establish a Denney Collin-Chessed softing a has been applied, so fix, to about 70 le some miling, tracium slove Million alone is difficult, but continue the office militar morning the bead-

reling. Now brand desire advantages * Arelighie to Industry-Chen Mill Timo Peducts, Inc., Les Aspeles,

*Metals Isrobed-The process can be

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. Dichon after forming. The process . No washing systems. Char

believes, respectives and narconium, shows on the sample of stopped short, surface of a short at the same base

Typical Examples of Chem-Mill's Work on Plane Parts . . .





our shows face Chera Mill faculty



SEEN PANEL was radial (light asset) from: SMOOTH FORTION (boot) of stod from

· Lightweighe construction. Light these-valled part, NAA carraces we I consent remed for chem-culture due to standard core and estimated PHON BY Degr-The motion, strat-Chart returner betraction and a Demonstratib polyme tollowed with chem-mullipe to transfer datase stresses. . Mild and each to decoring the sinface. This river is water breakfeer. · Ringley, with but water CHOFT · No bushly skilled exceptors crossed * Multiplicity of production. The corn ber of must which can be etched at the

Soundary is not out, parking part in abed chem salled party open no further . Final stripping at done after chemnot such as souting as policinar to melting, and the part is bright-depen-

unling-received outs through per shade at convolution of 10,000 man

SCALE STREETS by CheerMill Street

Typical Applications . Walfe page! In this molicetips, two





Licensed in the utility category, the Beecharsh Benazara at the only 4-place ampliant capable of passing CAA Utility Category Tests at 1td great weights, making it has worder strongest 4-place simplane. And if is the funts, too with creations record on to 184 min — the Owner report that there are IOI Resease for the Reschemit Bearant Supernosity. The four thousand term-tented and servicegroved Beechemit Bearans sees at sorth for business and intentity in all of the 68 States and some 50 Seesage countries are proof of the Bearant's design, structural, and highperformance operating efficiency. Here are a few of the NEW Bearant Sentence for 1955:

A NEW Additional Window on each side provides even greater weakfity, greater sudety, and greater conduct.

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Bossam, provide ten more galless of fael in each ware. When asstalled, they provide greater range without loss of bagging again.

ADDITIONAL has been for front-and passengers new

available through a special PSS entellation.

COMPLETE between Palesting is an exclusive standard feature of the Scenaria. The new 195 designs are

vides the alternate is design quality of materials and wedomachip. Ecochemist exclusive adety harmen furnated standard in harmonising colors. HBM Perham-Bees, Adjustede Seats for the Bonanza growth other traps in confect for all passengers.



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Distance Region Annual Services Service

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During the part dende practically all materials and has been manufed with throughout the world see flying with sld periodicate as a parameter instrument is so the and being search for minerals and off for pucholishy of all, but offendance next to

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consumer Equipment Duign - Irung Deck, Mgr., System Dir., Furthild Consmarine industry and the monat of the for rether with the many madenganes at the Engagement Acarm under a restruct run P.Pobless of Alondi Combustion for the less believe of each subsection.



Inside the Northron F-89D

Northern KERD Norman's Strikets name. Note 155 A.M. Sections, and obstances. creater, in allows in this phonton new of heracted and face 2.75 in, faither for the emit's interior. Ingernal details are also realisms walkent seeing their target. F-SSDs given of the plane's combination wingsig and in covers in Alaias (see stary, p. 21) recent feel unds. Fowendards use two At- and well Air Defence Command.

Though the resold application of these

Instrument Systems And Simplification

Plotwert Saphiston-Lt Cont. expendition to the development of make

This plants provents a new companious sampleway, weight, size, reliability, and success which must be made to obtain as

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Are "Standard Practice" at Allied's Plant 3



More's on advertit most on which three Q.D. surfaces most he arrant within 00005" and conceptic with the locaset making classator within 0002". On these some dismeters a surface fields of 6 materials is required. Heat-treating Such produce in the production of many types of parts-most required in

lasse values-is the rule rather than the exception at Alfied's Flort 3. That's why Albed but become a professed supplier is not only the aircraft industry Allied also offers seeded fortifies for population of posts is experimental or

short run quantifies. If your present or fature needs call for precision parts, it can be definitely to your advantage to secure Allied's austrias. Send us your part prints . . . you'll receive a primpt realy from us.



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Compac Modules Head for Mass Output

By Plotte Kless Alexadeia, Va -Aviorio equipment empericipant toos will be able to bus



AGP's improved Timberine conduct higher employs new technique for extracting to required

The new ACF "Compan" from-

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MANATON WERE AUG. 23, 1954, p.

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up a facility to produce Trakerton medulus (Pais 1, 1954, p. 11). How-

that had worked on the Traington per . Bear as Bearway Down the rest green, recluding Robert L. Henry, voir they stuff, percented several hald ACF's statement that it expects its project engineer. Red now is general, but here have respectively more the AVATION WEEK, Mond T. 1905

rushing, possible an arborne roles.

ANIATION WITH HIRS 7, 1955

►Convac Verntkts-New and in-To show what can be done, ACP is frequency available with a 18-mc handwidth, a video recorresphiler, a decade

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► Wide Application—ACF but made an

To present upwented solder from construction, ACF has adhered closely nationable external difference is that the models a costed that not solidly so-

+ Curbon compression emisters. New MS rebes formalition provides nester suffragety Screens on



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Portable Airline Oxygen



provinces for even signingly wifes consum flow for passengers. Shaples has — takes from space. Used by all major sixface.





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Pioneers in Development of Vibration-Resistant Electrical Connector

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New Tame Resistors available in numbered of 100 physi-The smaller true RTW, descript Manufacturer's address 7117

100 stees with the too rise of metric testicu to emble them to take

How electrically-heated Multiplate "NESA" is used in the windshield of the Avro Aircraft CF-100



Tun Anno Amends CF-100 is the roost heavily armed digitor aircraft in the would. It is now The new lang-maps, all-weather interceptor has a surroul weedshield made of PPG electrically. boated Malteriore NESA Gloss This office neavales good vashelity for the pole under all weather Eight pieces of muze-tempered polished plots

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Aerodynamic Sliderule New sissuit performance anapates, de

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ME METICISCHIE correlles transfers. Rell Unit Automates Transistor Assembly A way method for mechanical in

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us engineer who looks to bis facure.

WRITE Manager, Engineering Personnel

P. O. BOX S. BUFFALO D. N. Y.

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* Coster Astrocket Philosophy-Orn member percised from established

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PROCESS MACHINERY DIVISION



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TODAY IN 1855, about development and production dupind on the selectable skill of highly moined Engineers comfem formulae, such on the Force in Pounds caus-Fun obore, to help provide simple solutions to correct

IN THE YEARS AREAD, whosely, pursuants and saper-

TO MIET THIS CHALLENGE, CONTAIN much more from near with manners. To get the sch done will receive convented and destine engineering. CONVAIR eriting eleterrorgement and feelf her to do the reb-

OPPORTUNITIES ARE UNLIMITED OF CONVAIR for York soliter seesive Engineers. If you have earlighnes in Managers in FORT WORTH 17545

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May 13-feetings of the Assessment No.

Mo. 25-26-Instanc of Radio Engineers.

Lever effects in Accolongmon, Bestran's

Age, 28 22: Approve Societ Society spring arcting, Saltenery Apr. 27/28. Secrety for Experienced States.

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Following successful tests of the new

Consider Screec NucDentild Box Fiscal Period Pendty-Joth of the to reflect enly negligible penultus on

As no exemple of apprication we De Haveland states that its amplicatformore pends when excerting from difficulties with the note goor are being over the float hour when retracting and



first rice in a hydrodynamic "Seed spet," se popujo no doce to seal off A red light on the nockput signals beels-down leading in the water a Benery wheel principles in her he duelle urks at each wheel and overthe retraction cycle. There is an in-h

lend operations, takeofic and leadings. Moreovisers are incuted behind the wheel configurated when actuated

super in the cockent to show wheel in other extended or setrected postboo.

OK carbide cutter

facemills push-rod faces of cylinder head for world's most powerful piston aircraft engine



The sine televaness specified by the sireralt industry are a challance to the Papeliffs most modconveiling nations' and the boosts's most modern militar mechanic."

The picture shows one of the county of railing. rateling recognition. Note the tilting forces which makes resultly face and nerishary refine, of both odes of the cylinder head. OK earlade million cutters are widely used it

for coughing cuts. They gut more finished pieces on the floor, day after day. Blades are simple verifical used blocks. (The

weder is world's stronger machanisal desire). Blades once set current move. Mated secretions. present tipping and skepping, provide a scale for blade adventoraced to compensate for west. unders streetest to less them. 606" per blade on cutters in which the fine adjustment feature in incorporated. No locks, Mocks, screws, pray or

Write for OK Tool Catalans



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process true curburcture, such as the

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tric Corp. Load heals not designed to. Micharas, Dell. Blood. Co., P.O. Ros.

Automotype feel flowmeter is con-

Cooled Lord Bunks

Adjustable Speed Drive Provides Stepless Control

A new admitable ment divine one by fitted with visions troop of ough up-

Drawinode Coupling is a strainnary-

The band cooling festure allows

Dynamic Division, Eston Mana-

Meery Markinsery Co., Inc., 383 ALSO ON THE MARKET

LOAD SAME (right) being used web resilie stated. Arms see carried screenstandly

The compact, lightweight usets are plus, rupe, furnier des, and the like

Kod Kudles supply a loop of material

Up to 100 circuits can be opened in-



AND LAVATORY HARDWARF









and forlish unless is the man who becomes revoked in it if he doesn't

*Com-Pointer Problem-It used to be that a man-sized directional green days when "turn night" and "turn left" saforesation was obtained was the earthware. With the advent of the electronic representation it seemed

Watching a pilot new to IES toying to close the needles down the

Figure Bir Com-Recoding of New "sitesets" some of the new collects beford at the skyrny ministerior) and remunfored two we are writer new, many priors advecate a schem to the sust use. The five-such air the rection 21 deg. estimate. And it should have autretracous action-

Brides instrument represent use, there are other waspes for necessity

ANNATION WORK, Month 7, 1921

DAY AND NIGHT ATOMIC BOMBER DESTROYER

Gloster Javelin





Vibration measurement

in

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AIR TRANSPORT

Congress Challenges CAB Feeder Policy

Senate Commerce Committee and Board member proposal to Sm Wester Magazon. Adams support permanent certificates for local lines.

· But certification of scheduled helicopter operations meets strong opposition in the aviation subcommittee.

By Katherine Johnson cution of the 14 local survice orders. The opposition teatment was chal-loged, arther than digested. Members

* CAB member learnh Admin took

+ Sep. Col Hitshaw Jazuched a drive

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► 'Not So Clear'-CAB's assert counsel Adams and "it is likely" that local

"In supporting the volution of these tive to all our currien. We have that

Differing Views-Advent said the 20%

Red Airlines Undercut excluses of presents entitioned IATA Rates in Austria But Gurney had a defenset interner (McCow thit World News)

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Cairo Plans Heliport well be extraorded at rates below those Cates, Egypt-A central six terminal. oble become East German, the all to said from the sepport, is to be built ts Caso by the Ministry of Managed Arrest fronth cost is cut below the leted not because transportation

► CSA Persegres-Creshedwalada board. The unline may is marriaged the

connected with the official rephases rate

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*Lathana Faight-Eng Ground's could refer tanagement, scooltru this true, publisher optical and Prospective members of sielise careation have made ment strates, and of sectionis Library and but that

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Artificial manetary value of the Red mank is 24 for each U S dollar,

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North Central Gets Detroit-Chicago Route

South Boad, lad., and Kalegaron, their enternedate poets while North

Rood poets out that as of Dec. 3 \$12,129, while North Control's not worth was \$793,532. Negative work

Public Latered Factor-North Con por they decrease. He says that either world have to establish facilities at

In weighing the senses contentions P Tenering Service'- 'The mineral of the three councy, the CAR traine and only conducts differences, as I aty has found that "the breader public on them, between the applications of

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CAS mention lough P. Adena

The public interest requires CAB

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Comet Buyers Switch to DC-7C, 1449

Board Approves New TWA-Ethiopia Pact Contained operation of Ethopony

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AVAILEN WEEK, March T. 1955

Private, Business Flying Gains 4% of all U.S. neonalitary frame and a

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Colonial Free of EAL Control: Examiner

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Lave Field-Dallas Plans Modern Terminal A morner adough that will become our further a surfaced. Construction will may program from terrored to place feeding gather than you. The slowe bushes "Survey" and will be among the highlights of the new hore peep for 20 Douglas DCTs and can termind being abmood for Lone Fold at the expended. CAA gusted tower will be

Calenal stock Bet the report said

SHORTLINES

Mr Inde Introduced a reported

FRIM Rayal Death Aidless has re-* Mober's Arrives has opcood a non-

Southern Armans January repurpers

I United Air Lines products the greatest stage of spong pleasure towel as sto

▶ Control Airflant' severage resources AMAZION WEEK, March 7, 1955

as first under control to may way by 1951. Revenue personger miles so was a non-occurring net gent of \$955.

Feature for Long " 774 from the sale of occurring comm-► United Air Lines had its best lieusers traffic record to battery, flying 200,541,-800 reverse penerger toles, 2,788,000

Nonsked Groups Fail To Agree on Merger

► Coutsel Split-Last week's spectrus

necessirat Handley B. Johnston or trotative plus escapación sesces aron

More mobles, colletour the commo

Gapital Reports Higher Net Profits, Revenues

Highlights of Capital's 1959 report

 Opening expenses were \$45,718,346, Cur of each multiple towels flows *Planes or revenue recrossed 7 2% to Country total oracle were \$24,997,-

CAR ORDERS

Western Are Lines enthously to continue

Whorly Ar Lies, Ltd. personne to

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North Central's Record Booste Feeder Cause

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North Central's record dames 1954 proves there is a properly explorted. A good example is the Chango Meteorate run where these two large andwesters enter his less than 100 reducepart, baked for years by only a scare half-dozen flights dark when they were dependent soldy on truck solve service. Now North Central operates 32 fleghts disky between Milwonkee and Chicago. at where a good chank of Hal Carr's new revenue in derved-from a market in which the track airbress

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When the Navy's revolutionary new interceptor — the Convair XFY-1 — takes off and lands, it gets all its lift from its dual rotating propellers which are driven by Allison T40 Turbo-Prop engines.

That means the power package produces greater thrust than the weight of the aircraft for take-off and slightly less thrust than weight for landing. This delicate landing operation requires the engine to deliver positive and depend able power in the exact amount called for by the pilot.

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This YTO fighter was designed to take off and land from a destroyer's fantail or a freighter's deck which means that each ship in a convoy can carry her own defense against attacks for the entire voyage—promising greater safety for these surface craft.

Along with Convair and the U.S. Navy, Allison takes great pride in the spectacular success of this new type aircraft and in the simple accolade—"Well Done."









